1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

133 the results of recent eruptions but of the weathering of the lava. The soil is not uniformly distributed. On the plains it is often shallow and stony, but where it is thicker it is fertile and suitable for intensive cultivation (208, vol. 2, p. 488). At Poike the soil is deepest though this region does not seem to have been tilled in former days.

It has been stated repeatedly that the surface of Easter Island might have been larger within human time. However, this does not seem to be true. The line of burial platforms follows the shore and, though wave erosion is certainly rapid along the ashy volcano slopes, only two monuments have been attacked by the sea. Ahu-rikiriki, on the southern slopes of Rano-kao has fallen, and the same fate awaits ahu Ohau at the northwestern point. At the time of my visit (1934), one of its wings had been cut away from the main building by a deep fissure and could not be approached without danger.

The contrast between Easter Island and most other high Polynesian islands is striking. It has no rugged peaks, no ridges, no deep valleys, no ravines, only a monotonous succession of cones and rounded capes above the basaltic plains or the high cliffs of the coast. On all sides are smooth, undulating curves.

Climate

132 Easter Island belongs to the tropical zone, although its barrenness is more suggestive of Scandinavian scenery than of tropical landscape. The island lies near the southern limit of the southeast trade winds which blow constantly in summer. In winter, northwest winds predominate and southwest winds are as common as those of the southeast. The average temperature, as recorded over a period of two years (1912-1913), ranges between 73.4 and 62.6 degrees Fahrenheit. The climate is uniform and very mild. Even the hottest days are made agreeable by constantly blowing winds. However, the slightest change in temperature is noticeable and the nights seem quite cold, even to the islanders. The cool temperature of the sea is one of the factors which has prevented the formation of a coral reef, but, as pieces of coral are often cast ashore by wave action, there must be some growth along the coast.

The rainfall averages about 50 inches a year. Rain is heavy in the winter months, from March to October, and showers are frequent in both spring and summer. Sometimes such showers develop into downpours of great force. Thunder and lightning storms are rare but not entirely unknown. Constant rain and mist for two weeks or more are common in winter. On the other hand, natives recall short droughts, which probably did not last long enough to harm the vegetation. The abundance and frequent violence of the rains have not affected the general contours of the island, due to the fact that water disappears beneath the surface rapidly, leaving the ground dry.

10: Cooke D-5 (1886) 1899
OY2 Easter Islanders OY2

342 natives built many of these huts, the cairns for the dead, and other buildings, of these lava blocks, loosely piled up, and Messrs. Salmon and Brander apply them to good use in constructing their extensive corrals and fences, with the added advantage of thus clearing the soil for planting, wherever desirable.

137 A coarse hummock grass and a variety of finer quality grow profusely over nearly the entire island, sprouting vigorously among the lava fragments, and affording abundant pasturage for the herds of cattle, horses, and sheep, the former numbering 600 and the latter 18,000 at the time of our visit, and both multiplying rapidly.

134 On the northeastern end of the island, and on the slopes of Mount Pua-ko-taki, the surface is covered with fine, red, volcanic sand and dust, which is kept in constant motion by the winds, and is barren of vegetation of any kind.

132 At the time of our visit, December, which is during their dry or summer season, extending from October to April, the periods of the 312 southeast trades, there were no running streams on the island, nor, with the exception of the valley at the base of Rana Kao, were there any evidences of the former existence of such visible. Fresh water away from the habitations was exceedingly scarce and difficult to obtain, although showers of rain at night were not infrequent.

312 The alleged springs or wells, including *Puna Pua*, the "Unfailing Spring," so highly spoken of by former visitors, were at long distances apart, were merely shallow excavations among the bowlders into which the surface water percolated, and were covered to protect them from the animals. The water contained in them was rarely of more than a few bucketsful in quantity, and with a single exception, at Camp Whitney, of bad quality. That contained in the lakes inside the two craters, the accumulations of the rainy seasons, and surface drainage also, was fully as bad, and impregnated both with vegetable and animal matter, the former from the dense growth on the surface, the latter from the herds of cattle which came to the lakes to drink.

271 It may be mentioned in this place that the natives, from long habit, no doubt, have become accustomed to drink but sparingly. We were surprised, during our expedition around the island, to notice how rarely they resorted to the canteen, with which all were provided, and they, no doubt, were equally amazed at our constant demand for water, made necessary to replace the loss from perspiration, induced by violent exercise and the sun's heat. They were always careful to locate our camp near, and anxious to keep us well supplied with, as good water as was to be had, and when we broke camp in the morning the "springs" in the vicinity were usually drained dry.

312 It was at first a mystery to us whence the animals obtained their supplies, but as to the cattle, they never wandered far away from the craters, in whose lakes they could, at all seasons, quench their thirst. In so far as the sheep were concerned, whose needs in this respect are

10: Cooke D-5 (1886) 1899
OY2 Easter Islanders OY2

likely to precipitate them into the depths below. A path of planks has been laid to the edge of one of the openings, the more readily to enable the natives to obtain the water, which, as may well be inferred, is brackish and unpleasant to the taste and thoroughly impregnated with animal and vegetable matter, vast masses of the latter being in a constant state of decay. 312

The climate can scarcely be otherwise than salubrious and healthful. The southeast trades from October to April blow fresh at the beginning and end of the season. During our stay in December they were moderately strong, and the weather continued exceedingly pleasant. For the remainder of the year the winds are uncertain, westerly prevailing perhaps; the weather is changeable, and there is abundance of rain. Electric storms are unknown. 132

A psychrometrical record taken both on board ship, and to a very limited extent ashore, accompanies this report; as also a copy of the meteorological record from the ship's log during our stay at the island. In the latter the figures in the column "wet bulb" are not entirely reliable, by reason of the inadequate nature of the cotton siphon, which consists merely of a few strands of ordinary lamp wick and does not cover the bulb. With the exception of the two craters of Rana Kao and Rana Roraka, the bottoms of which form lakes, as already stated, and which are isolated and far from the habitations, there is no decaying vegetable matter to be found worthy of note, and the island may therefore be said to be free from malaria and the diseases of paludal origin. During the rainy season an occasional case of remittent appears, but it is of mild type; medication is not resorted to, and recovery takes place when dry weather sets in. So healthful is the climate, so simple are the habits of the people, and so isolated are they from contact with the outer world, and, consequently, the numberless malign influences which there hold sway, that diseases of any kind are very rare among the Rapa Nuis, and they seem to be exempt from the ordinary ills of humanity. There are no "medicine men" among them, and they have no pharmacopœia worthy the mention. 164 [756 278]

During inclement weather a trifling "cough"—occasionally a case of pneumonia—a mild attack of rheumatism, may appear, and mention is also made of cerebral neuralgia. During our visit there was not, to the best of our knowledge, a case of acute disease on the island.

It is stated that from May to October occasional cases of asthma show themselves, which the natives attribute to eating deep-water fish which have fed on a certain marine plant, the name of which the writer was unable to ascertain. This may be taken as delusion; and it may be mentioned in this place that a well-marked case of asthma, in the person of one of the *Mohican's* firemen, was notably worse and suffered severely during the entire period of our stay at the island. 164 753

A disease of the soles of the feet, which the natives called *kino*, consisting, according to their statements, as understood, of fissures and ulcer-

11: Lavachery A-5 (1934-1935)1937
OY2 Easter Islanders OY2

in a part of the southern ocean far removed from that in which the gaunt cliffs of Easter Island confront the unceasing assault of the waves. It is surrounded by vast ocean depths which occur in the expanse of 2,500 miles of ocean separating the island from the American coast on the east and from the nearest land 1,750 miles to the west, namely the Gambier Islands. Easter Island is a volcanic island, and a lofty one, like the Marquesas and Hawaii, in contrast with atolls and coral islands which are low-lying. If one could denude such islands of their dense coverlet of mango-scrub, breadfruit trees, bamboo and cocoa palms, drain the springs, and cover them with a growth of yellow herbage—then such an islet as Hivaoa of the Marquesas will come to resemble Easter Island.

It is the bareness of Easter Island, the result of its colder climate and exposure to the four winds of heaven, which has given birth to these misconceptions. The idea of Polynesia does not fall in with a barren rocky landscape, monotonous pampa, or a pale sun incessantly obscured by rain-clouds.

These talkative Pascuans,[4] like naughy laughing children, whose language and appearance is Polynesian without a shadow of doubt, can no longer be denied those ancestors who carved the notorious statutes, engraved the puzzling symbols of *rongorongo* and set up round the island's coast all those innumerable monuments (actually 184).

At what date was Easter Island first settled? There are excellent reasons for believing that it was between the twelfth and thirteenth centuries of the Christian era. We have certain traditions relating to the peopling of Hawaii and New Zealand. The Polynesians established themselves there at the end of their migrations between the eleventh and thirteenth centuries. Considering the remoteness of Easter Island, it is reasonable to suppose that it was peopled about the same time. The approximate date of the colonization of this island is, however, based upon the list of the Pascuan kings. This list has been narrated to several observers; the most complete is that of Thompson[5] who obtained it from an informant who was a survivor of the pagan period. One may assume a length of 12 years for the reigns of each of the 57 kings in the list. Maurata, the last Pascuan who was certainly regarded as a king, died in 1864, as a result of the Peruvian slave raids. Calculation gives us exactly the beginning of the thirteenth century.

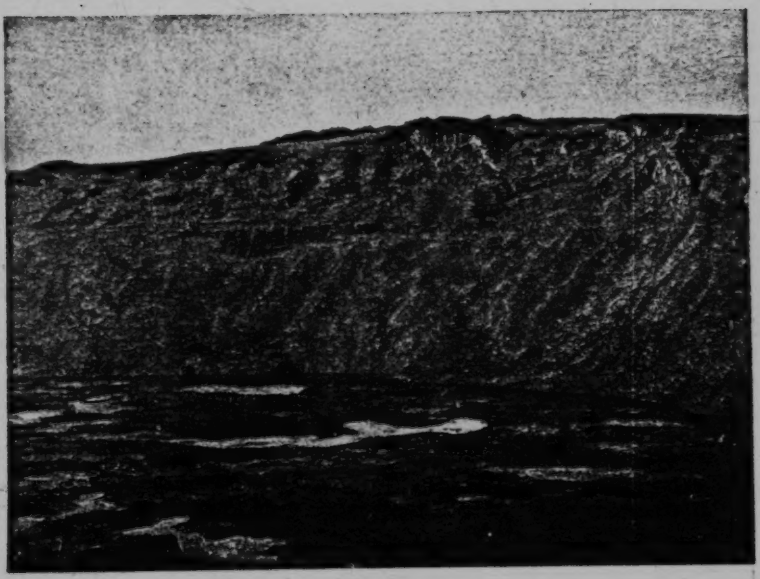
---

[4] We may well adopt the English equivalent to avoid the clumsy "Easter Islanders."—Translator.

[5] A paymaster of the American Navy, and the author of a short archeological account which, considering that it was based merely upon a visit of 8 days, is remarkably informative and full. (Rep. U. S. Nat. Mus., 1889, pp. 447–552, 1891.)

14: Routledge E-5 (1914-1915) 1917
OY2 Easter Islanders OY2

133



CR.

132
532

[facing p. 325 a]

RANO R